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09/601,363	08/01/2000	Achim Pietig	048662/0125	2240

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EXAMINER

FUREMAN, JARED

ART UNIT PAPER NUMBER

2876

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/601,363

Applicant(s)

PIETIG, ACHIM

Examin r

Jared J. Fureman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Receipt is acknowledged of the request for extension of time, RCE, and amendment, filed on 8/13/2003, all of which have been entered in the file. Claims 13-20 and 22-24 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-20 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reiner et al (US 5,875,450, cited by applicants) in view of Sugita (US 6,595,413 B1).

Re claims 13, 22, and 24: Reiner et al teaches a portable microprocessor-assisted data medium (a chip card with microprocessor 9) able to be operated in both contacted and contactless fashion, and a method for carrying out communication between a portable microprocessor-assisted data medium and a data input/data output unit operating in contacted fashion or a data input/data output unit operating in contactless fashion comprising: a structure (a first interface 1 with contacts, see column 3 line 57 - column 4 line 5) for carrying out a contacted mode, in which the portable data medium and a first type data input/data output unit (not shown) transmit data to each other in a contacted fashion, a structure (a second interface 2 formed, for example, by a

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coil, see column 4 lines 6-17) for carrying out a contactless mode, in which the portable data medium and a second type data input/data output unit (not shown) transmit data to each other in a contactless fashion, wherein the portable data medium has at least one memory area (memory 5) divided into various memory areas, such that the portable data medium stores (the switching logic may be a ROM, PROM, EPROM, or EEPROM, see column 3 lines 17-26 and column 5 lines 6-18) at least one access condition for at least one memory area (transmission of address, control and data signals fed in through the first interface 1, only takes place when an identification or authentication procedure has been carried out between the device for processing and storing data and a terminal or a user of the device, see column 4 lines 40-53), the access condition defines the condition (identification or authentication has been established) under which access to the one memory area is permitted, and wherein the portable data medium stores at least one data transmission-specific access condition for the one memory area (for example: a writing access which increases the value of money stored in the memory is possible only by the type of transmission with contacts, see column 2 lines 38-46), the data transmission specific access condition defines the basis of the type of data transmission (contact or contactless) between the portable data medium and the data input/data output units and the condition under which access to the one memory area is permitted, wherein the portable data medium is designed such that the data transmission-specific access condition can be input/reprogrammed into a freely programmable nonvolatile memory (an EPROM or EEPROM) in the portable data medium by authorized agencies (see column 3 lines 17-25 and column 5 lines 6-13),

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wherein the portable data medium is designed to carry out data transmission between the portable microprocessor-assisted data medium and either or both of the first type data input/data output unit operating in contacted fashion and the second type data input/data output unit operating in a contactless fashion, wherein, before the one memory area is accessed by an access command transmitted by the data input/data output units, the portable data medium itself uses a checking program stored in the portable data medium (the switching devices 3 and 7 are controlled by a logic circuit, which is advantageously formed by a microprocessor 9, see column 4 lines 40+) to read the data transmission-specific access condition associated with the one memory area and to check, on the basis of the data transmission-specific access condition, whether access by the access command is permitted for a particular type of a current data transmission, wherein the access command is executed only if the result of the check is that access by the access command is permitted, checking by the portable data medium using a checking program stored in the portable data medium to determine, before the one of the memory areas (the money value memory area) is accessed by an access command transmitted by one of the data input/data output units, whether in consideration of the data transmission-specific access condition (whether increasing the value of money is permitted or not), the access command is permitted given the a particular current type of data transmission (contact or contactless), and executing the access command only if the result of the check is that access by the access command is permitted (also see the figure, column 1 lines 10-19, column 35-65, column 2 lines 6-

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60, column 3 lines 17-26, 44-53, column 3 line 57 - column 4 line 17, column 4 lines 40-53, and column 5 lines 6-18).

Reiner et al fails to specifically teach the data transmission-specific access condition being input/reprogrammed using an item of secret information.

However, Reiner et al also teaches transmission of address, control and data signals fed in through the first interface 1, only taking place after an identification or authentication procedure (which includes an item of secret information such as an authentication code or PIN) has been carried out between the device for processing and storing data and a terminal or a user of the device (see column 4 lines 40-53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the system as taught by Reiner et al, the data transmission-specific access condition being input/reprogrammed using an item of secret information, in order to increase the security of the system.

Reiner et al fails to specifically teach the checking program being stored in the freely programmable nonvolatile memory in the portable data medium.

Sugita et al teaches a portable data medium (IC card 7) including a single programmable nonvolatile memory (10) for storing both programs and data (see figure 5 and column 3 lines 23-28).

In view of Sugita et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system, as taught by Reiner et al, to include the checking program being stored in the freely programmable nonvolatile memory in the portable data medium, in order to provide a portable data medium

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requiring only a single memory to store programs and data, thereby allowing a smaller and less expensive portable data medium as compared to the use of separate memories for storing programs and data.

Re claims 14-20 and 23: The teachings of Reiner et al as modified by Sugita et al have been discussed above.

Reiner et al also teaches wherein a data transmission-specific access condition for the contactless mode is provided for at least one memory area, the access condition prohibiting any access to this particular memory area in the portable data medium's contactless mode (memory areas which can only be accessed by the first interface can not be accessed in the contactless mode, by the second interface), wherein a data transmission-specific access condition for the contactless mode is provided for at least one memory area (the money value memory area), the access condition defining different conditions under which access is permitted for each of at least two different access types (writing which increases the value of money stored in the memory, and writing which decreases the value of money stored in the memory) in the portable data medium's contactless mode, wherein various access types (writing access which increases the value of money stored in the memory, or writing access which decreases the value of money stored in the memory) are allocated different data transmission-specific access conditions for a memory area for the contactless mode, the access conditions defining the conditions under which access is permitted for the respective access type in the portable data medium's contactless mode (for example: a writing access which increases the value of money stored in the memory is possible only by the

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type of transmission with contacts, see column 2 lines 43-46), wherein a data transmission-specific access condition for the contacted mode is provided for at least one memory area, the access condition prohibiting any access to this particular memory area in the portable data medium's contacted mode (memory areas which can only be accessed by the second interface can not be accessed in the contact mode, by the first interface), wherein a data transmission-specific access condition for the contacted mode is provided for at least one memory area (the money value memory area), the access condition defining different conditions under which access is permitted for each of at least two different access types (reading, and writing which increases the value of money stored in the memory) in the portable data medium's contacted mode, wherein various access types (reading, writing, or specific forms thereof) are allocated different data transmission-specific access conditions for a particular memory area for the contacted mode, the access conditions defining the conditions under which access is permitted for the respective access type in the portable data medium's contacted mode, wherein for at least one memory area (the money value area) and for at least one access type (writing access which increases the value of money), one data transmission-specific access condition is provided for the contacted mode (writing access which increases the value of money is permitted in the contact mode) and one data transmission-specific access condition is provided for the contactless mode (writing access which increases the value of money is not permitted in the contactless mode), wherein the data transmission-specific access condition is stored in a non-modifiable read only memory in the portable data medium (a ROM, see column 5 lines 6-9) (also

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see the figure, column 1 lines 10-19, column 35-65, column 2 lines 6-60, column 3 lines 17-26, 44-53, column 3 line 57 - column 4 line 17, column 4 lines 40-53, and column 5 lines 6-18).

Response to Arguments

3. Applicant's arguments with respect to claims 13-20 and 22-24 have been considered but are moot in view of the new ground(s) of rejection.

As discussed above, Sugita et al teaches storing programs and data in the same programmable nonvolatile memory.

In response to applicant's argument that Reiner et al does not disclose a checking program stored in a nonvolatile programmable memory (see pages 6 and 7 of the amendment filed on 8/13/2003), while Reiner et al does teach that access to particular memory areas is effected through switching devices 3 and 7 (having individual switches 3a, 3b, 3c, and 7a, 7b, 7c, respectively), these switching devices are controlled by a logic circuit 8 (among other components) which is advantageously formed by microprocessor 9 (see column 4 line 18 - column 5 line 5). The switching logic is realized particularly advantageously by a ROM (or PROM, EPROM, EEPROMS) since this makes it possible to set different selection criteria depending on the application (see column 3 lines 17-26). Thus, Reiner et al teaches that it is advantageous to use a programmable nonvolatile memory. In operation, the microprocessor 9 would have to read the value(s) stored in the memory (ROM, PROM, EPROM, or EEPROM) to determine the proper signals to send to the controllable switching device, in order to set the switching device to the positions which are allowed in correspondence to the first

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and second interfaces (see column 4 lines 18-53), or the basis of the memory operation to be executed (see column 2 lines 28-46). Thus, this reading and interpreting of the values stored in the memory and setting of the controllable switching device(s) does serve as a checking program, which is stored in the data medium itself to read the data transmission-specific access condition associated with a particular memory area. Thus, it is believed that Reiner et al meets this claimed limitation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jared J. Fureman whose telephone number is (703) 305-0424. The examiner can normally be reached on 7:00 am - 4:30 PM M-T, and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

September 8, 2003

Jared J. Fureman
Jared J. Fureman
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